REMARKS

In view of the above amendments and the following remarks, reconsideration of the rejections contained in the Office Action of March 9, 2009 is respectfully requested.

By this Amendment, claims 6-8 have been amended and claims 9-11 have been cancelled. Thus, claims 6-8 are currently pending in the application. No new matter has been added by these amendments.

On pages 2-3 of the Office Action, the Examiner rejected claims 6-11 under 35 U.S.C. § 103(a) as being unpatentable over Hasegawa et al. (US 5,650,024) in view of Scarlin et al. (US 5,415,706) or Shiga et al. (US 4,477,280). For the reasons discussed below, it is respectfully submitted that the amended claims are clearly patentable over the prior art of record.

Independent claim 6 recites a welded joint of a tempered martensitic heat resisting steel, wherein the heat resisting steel having a tempered martensite structure consists of the following elements by weight %, C: 0.03 to 0.15%, Si: 0.01 to 0.9%, Mn: 0.01 to 1.5%, Cr: 8.0 to 13.0%, Al: 0.0005 to 0.02%, Mo+W/2: 0.1 to 2.0%, V: 0.05 to 0.5%, N: 0.06% or less, Nb: 0.01 to 0.2%, B: 0.003 to 0.03%, and the residue is composed of Fe and inevitable impurities. Claim 6 also recites that a fine-grained heat affected zone of weldment of the heat resisting steel having a tempered martensite structure exhibits a creep strength of 90% or more of a creep strength of a base metal thereof.

Independent claim 7 recites a welded joint of a tempered martensitic heat resisting steel, wherein the heat resisting steel having a tempered martensite structure consists of the following elements by weight %, C: 0.03 to 0.15%, Si: 0.01 to 0.9%, Mn: 0.01 to 1.5%, Cr: 8.0 to 13.0%, Al: 0.0005 to 0.02%, Mo+W/2: 0.1 to 2.0%, V: 0.05 to 0.5%, N: 0.06% or less, Nb: 0.01 to 0.2%, B: 0.003 to 0.03%, one or more of Co in an amount of 0.1 to 5.0%, Ni in an amount of 0.5% or less and Cu in an amount of 1.7% or less, by weight, and the residue is composed of Fe and inevitable impurities. Claim 7 also recites that a fine-grained heat affected zone of weldment of the heat resisting steel having a tempered martensite structure exhibits a creep strength of 90% or more of a creep strength of a base metal thereof.

Independent claim 8 recites a welded joint of a tempered martensitic heat resisting steel, wherein the heat resisting steel having a tempered martensite structure consists of the following elements by weight %, C: 0.03 to 0.15%, Si: 0.01 to 0.9%, Mn: 0.01 to 1.5%, Cr: 8.0 to 13.0%, Al: 0.0005 to 0.02%, Mo+W/2: 0.1 to 2.0%, V: 0.05 to 0.5%, N: 0.06% or less, Nb: 0.01 to

0.2%, B: 0.003 to 0.03%, one or more of P in an amount of 0.03% or less, S in an amount of 0.01% or less, O in an amount of 0.02% or less, Mg in an amount of 0.01% or less, Ca in an amount of 0.01% or less and Y and rare earth elements in a total amount of 0.01% or less, by weight, and the residue is composed of Fe and inevitable impurities. Claim 8 also recites that a fine-grained heat affected zone of weldment of the heat resisting steel having a tempered martensite structure exhibits a creep strength of 90% or more of a creep strength of a base metal thereof.

Hasegawa discloses a martensitic heat-resisting steel which includes several elements, as disclosed in columns 4-6 of Hasegawa. Among these elements, Hasegawa discloses that the steel includes at least one of Ti, Zr, Ta and Hf in order to prevent "HAZ-softening" in the steel. In this regard, it is noted that claims 6-8 each recite that the steel consists of the identified elements, and thus excludes any elements not identified in the claims (as set forth in MPEP § 2111.03). As none of claims 6-8 identify Ti, Zr, Ta and Hf as being elements included in the steel, those elements are excluded from independent claims 6-8. Accordingly, as the elements Ti, Zr, Ta and Hf disclosed in Hasegawa are excluded from claims 6-8, Hasegawa does not disclose a steel which consists of the elements recited in independent claims 6-8.

Further, as noted by the Examiner on page 2 of the Office Action, Hasegawa does not disclose a steel which consists of 0.003 to 0.03% B, and which consists of aluminum as required by independent claims 6-8.

In this regard, the Examiner cites Scarlin as disclosing that it is known to add small amounts of B in steel alloys to further enhance hardenability, and cites Shiga as disclosing that it is known to add Al to steel alloys for deoxidizing. Thus, the Examiner concludes that it would have been obvious to one of ordinary skill in the art to modify the alloy of Hasegawa to include the small amounts of B and Al as taught by Scarlin and Shiga.

However, without acquiescing to the Examiner's conclusion of obviousness, it is noted that even if it had been obvious to modify the alloy of Hasegawa to include B and Al, the resulting alloy would still include Ti, Zr, Ta and Hf, as taught by Hasegawa and as excluded by claims 6-8. In this regard, it is noted that Hasegawa discloses that the inclusion of Ti, Zr, Ta and Hf constitutes the foundation of the invention of Hasegawa in that it results in the prevention of HAZ-softening (see column 5, line 65 through column 6, line 3). Accordingly, Hasegawa specifically teaches away from the exclusion of Ti, Zr, Ta and Hf from the steel, as such a

modification would result in a steel susceptible to HAZ-softening and would thus render the steel of Hasegawa unsatisfactory for its intended purpose, as prohibited by MPEP § 2143.01. Therefore, it is respectfully submitted that it would not have been obvious to one of ordinary skill in the art to modify the steel of Hasegawa to exclude Ti, Zr, Ta and Hf in order to arrive at the inventions of independent claims 6-8.

Therefore, it is respectfully submitted that independent claims 6-8 are clearly allowable over the prior art of record.

In view of the foregoing amendments and remarks, it is respectfully submitted that the present application is clearly in condition for allowance. An early notice to that effect is respectfully solicited.

If, after reviewing this Amendment, the Examiner feels there are any issues remaining which must be resolved before the application can be passed to issue, the Examiner is respectfully requested to contact the undersigned by telephone in order to resolve such issues.

Respectfully submitted,

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